

Total number of printed pages – 4

B. Pharm  
PH. E.5

## Eighth Semester Examination – 2008

### BIOASSAYS

Full Marks – 70

Time : 3 Hours

Answer Question No. 1 which is compulsory  
and any **five** from the rest.

The figures in the right-hand margin  
indicate marks.

1. Answer the following questions in brief :

2 × 10

- Explain fiducial limits.
- Why mean is a better parameter than mode and median as a measure of central tendency ?

- Give an example for bioassay in humans.
- In which bioassay twin cross over design is followed ?
- Explain about LAL test for parentals.
- Write an example for androgen bioassay.
- Write the details of digitalis bioassay by guineapig method.
- How do you carry out the bioassay of an antagonist ?
  - Rabbit head drop method is an example for bioassay of what drug ?
  - How is histamine biologically standardised by in vitro method ?

2. Define bioassay ? What are its advantages and disadvantages ?

10

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Contd.



3. Describe the microbiological assay of Vitamin B<sub>12</sub>. 10
4. Name the models used for the determination of the pressor activity of substances. How is adrenaline biologicals standardised? 10
5. Write the principles for the bioassay of : 10
- (a) Heparin
  - (b) Vitamin D
  - (c) Acetylcholine
  - (d) 5 HT.
6. Write short notes on the following : 10
- (a) Measures adopted to minimise biological variation in standardisation.
  - (b) Measures used to improve sensitivity of bioassays.

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7. Write short notes on the bioassay of : 10
- (a) Oxytocin
  - (b) Gonadotrophins.
8. Write in detail about 'culture-sensitivity' test conducted for selection of proper antibiotic for the treatment of infection. 10

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